<u>REMARKS</u>

Reconsideration of the above-identified patent application in view of the remarks following is respectfully requested.

Claims 1-12 and 14-21 are in this case. Claims 1-12 and 14-21 have been rejected under § 103(a). Dependent claims 3 and 19 have been amended.

The claims before the Examiner are directed toward a method, system and computer program product for supplying comparative information about specified items. Each item has a data entry in a computer's storage. Each data entry includes a name, one or more topics, and, associated with each topic, one or more values. Data entries corresponding to the items to be compared are retrieved from storage. The associated values are compared, and the results of the retrieving and comparing are presented as natural language sentences.

Please note that references herein to the specification are to the patent application as published, US Published Patent Application No. 2001/0032077.

§ 103(a) Rejections – Kelman et al. '255 in view of Pieraccini & Lee

The Examiner has rejected claims 1-12 and 14-21 under § 103(a) as being unpatentable over Kelman et al., US Published Patent Application No. 2004/0093255 (henceforth, "Kelman et al. '255") in view of Pieraccini and Lee, "Factorization of language constrints in speech recognition" (henceforth, "Pieraccini & Lee"). The Examiner's rejection is respectfully traversed.

The Examiner did not specify when Pieraccini & Lee was published. Based on a Google search, Applicant presumes that Pieraccini & Lee was published in *Proc. 29th Annual Mtg. of the Assoc. for Computational Linguistics*, Berkeley, CA, June 1991.

Kelman et al. '255 teach a "technology enabled selling" (TES) system that includes in its functionality a sales effectiveness application whose "generate module" generates natural language documents that may include comparisons of competing products. For example, Figure 14 shows a template for generating a document that includes a comparison of "Message Mart" and "Mallsuite".

The input to the generate module is in the form of "datagems" that are generated by an authoring software application. Many of the datagems are natural language sentences. This is clear from paragraph 0057:

> Input data **102** are examples of the types of data that may be transmitted to the administration computer **104** and to the central database **112**. Input data **102** includes a variety of content from a variety of sources. As shown, the <u>input data **102**</u> may include audio files, <u>portable document format ("PDF") files</u>, graphics files, <u>text files</u>, or generally any electronic data commonly transmitted. The content may include, for example, <u>brochures, white papers, website content, interviews with customers, etc.</u> A particular item of data **102** may include valuable information that may be placed in several different categories. For example, a <u>white paper</u> may have details about the strong or weak points of particular products, details about a particular customer's unique needs, and other useful information. In one embodiment, certain system users with administrative responsibility and pertinent skills and experience, such as marketing people in a user organization, review the input data **102** using an authoring software application on administration computer **104**. The administration computer **104** may run the authoring software application locally or remotely to allow administration of the system. The authoring application is a client/server application used to author and manage the information in the central database. <u>The input data **102** is reviewed and broken into smaller pieces of information at a subdocument level. The smaller pieces of information, referred to as datagems,</u> may then be classified in a manner that is helpful to members of the organization wishing to access the information later. For example, a datagem may be classified as a customer or user requirement, as a product feature, or as a success story. (emphasis added)

As best understood, the generate module does not construct natural language sentences to be included in natural language documents, but merely inserts, concatenates and/or rearranges natural language sentences that already appear in the datagems.

By contrast, the present invention, as recited in claim 1, constructs natural language sentences that incorporate topics and attribute values related to items being compared. The attribute values of the present invention are numbers, words and phrases, rather than complete sentences. Some examples of such attribute values are listed in paragraph 0045: "big", "blue", "round", "shirt", "computer" "apple", "expensive", "fast", "high", "top", "alone", KX-456 cellular phone", "made in USA", "breakfast", and "stone". In constructing natural language sentences, the present invention optionally combines these attribute values with their associated topics to produce phrases such as the ones listed in paragraph 0045: "blue color", "round shape", "big size", expensive look", "high resolution", "top quality", "playing alone", "KX-4546 cellular phone model", "used for cooking breakfast", and "a center piece made of stone". The present invention includes sufficient semantic and lexical intelligence to then present the attribute values and the topic-value combinations as natural-language sentences. In the communication filed on 18 March 2005, Applicant used this difference between the present invention and the teachings of Kelman et al. '255 to demonstrate that the present invention is not anticipated by Kelman et al. '255.

The Examiner now proposes that the present invention, as recited in independent claims 1, 18 and 21, is an obvious combination of Kelman et al. '255 with Pieraccini & Lee.

Pieraccini & Lee teach a method of speech recognition. As illustrated in Table 2 on page 303, the first step in recognizing a spoken sentence is producing, as a first guess, a sequence of words that seem to match the spoken sentence. This is followed by a semantic decoding procedure, in which the template, from among a plurality of natural language sentence templates, that best matches the sequence of words, is

selected. Words in the sequence that correspond to semantic fields in the template are compared to list of words that are allowed for those fields. If such a word from the sequence ("SUBMARINES" and "EIGHTY TWO" in this example) appears in the corresponding list, then that word is accepted. If such a word from the sequence ("DATE" in this example) does not appear in the corresponding list, then the word is replaced with the phonetically closest word from the list.

It is improper of the Examiner to combine the two cited references. The two cited references are from two different fields of endeavor. Kelman et al. '255 is analogous prior art to the present invention, but Pieraccini & Lee is not. Kelman et al. '255 is from the field of data base management and presentation. Pieraccini & Lee is from the field of speech recognition. Even though both references deal with the general subject of human-computer interfacing, the two references deal with opposite aspects of the subject. Kelman et al. '255, like the present invention, is concerned with how data stored in a computer is made intelligible to humans. Pieraccini & Lee are concerned with how human speech is made intelligible to a computer.

Even if it were proper to combine the two references, the present invention, as recited in independent claims 1, 18 and 21, still would not be obtained. The present invention *first* selects words to be inserted in a template (by retrieving data entries corresponding to specified items and comparing the associated values) and *then* selects a template appropriate to the selected words. Pieraccini & Lee *first* select a template and *then* seek the words to be inserted in the template. Thus, the present invention, as recited in independent claims 1, 18 and 21, is not a combination, whether obvious or not obvious, of the cited prior art references.
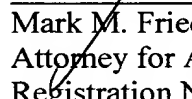
With independent claims 1 and 18 allowable in their present form, it follows that claims 2-12, 14-17, 19 and 20, that depend therefrom, also are allowable.

Amendments to the Claims

In the communication filed on 18 March 2005, Applicant amended claims 1 and 18 to recite the limitation from claims 3 and 19 that the information associated with each topic includes at least one value, and then inadvertently neglected to delete this limitation from claims 3 and 19. This oversight now has been corrected.

In view of the above amendments and remarks it is respectfully submitted that independent claims 1, 18 and 21, and hence dependent claims 2-12, 14-17, 19 and 20 are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

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